

# XO

## Ethernet over Copper Services

# XO Ethernet Access and Coverage

- XO delivers a suite of Ethernet services via multiple access options, including -
  - EoC: ~500 LSOs covering ~600,000 buildings
  - EoDS1: ~4,800 LSOs covering ~3.8 million businesses
  - XO Fiber: Ethernet capable buildings, ~1,300 and growing



# XO's Point to Point Ethernet Services

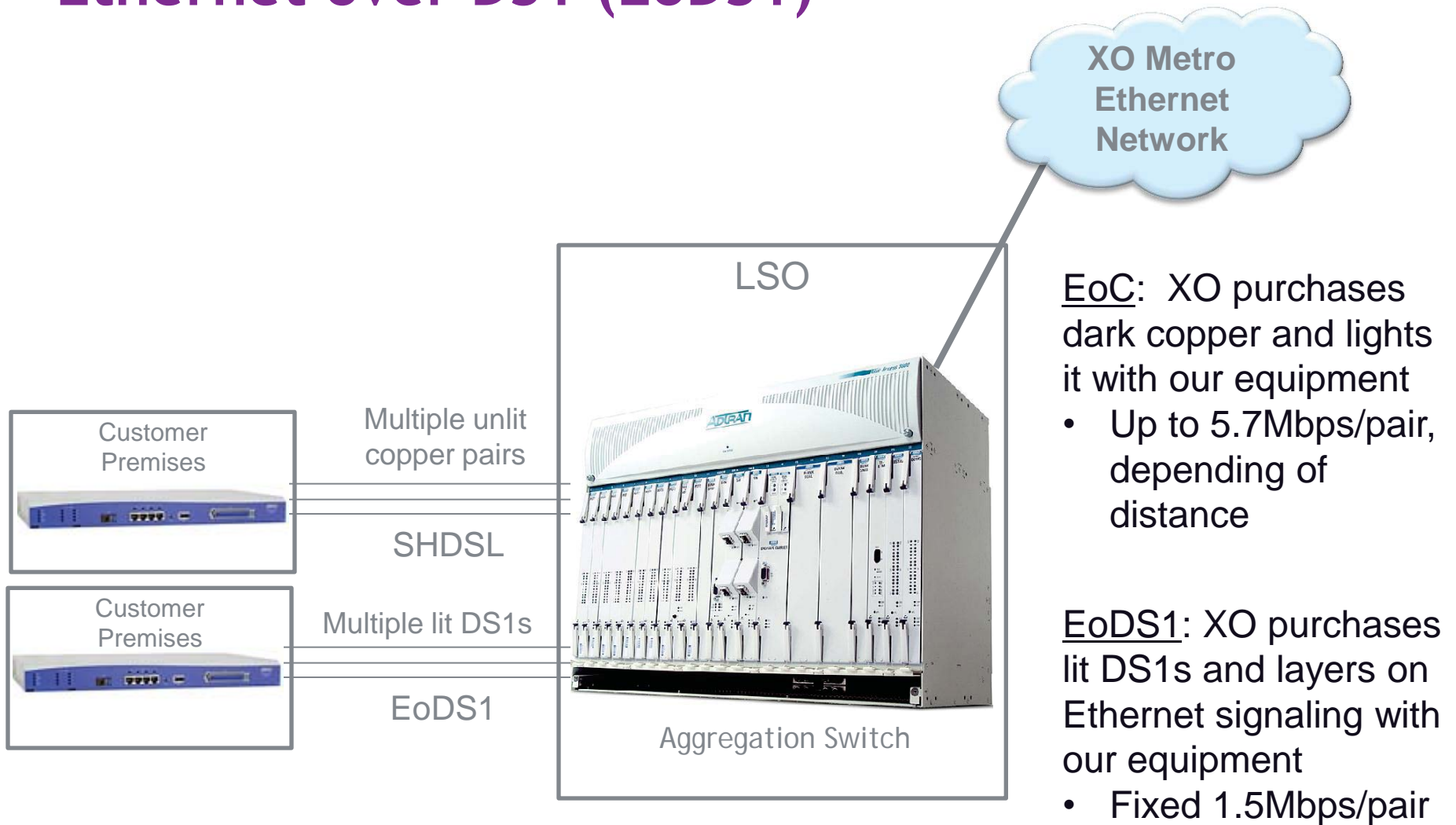
Bandwidth	EoC	EoDS1	EoDS3	On-Net
3M	✓	✓		
4.5M		✓		
5M	✓			
6M		✓		
10M	✓	✓		✓
15M	✓			
20M	✓			✓
30M	✓			✓
40M	✓			✓
44M			✓	
50M	✓			✓
60M	✓			✓
70M	✓			✓
88M			✓	
100M	✓			✓
200M				✓
300M				✓
400M				✓
500M				✓
1Gbps				✓
10Gbps				✓
100Gbps				✓

---

# Ethernet over Copper (EoC) and Ethernet over DS1 (EoDS1) Solutions

- **Most major LECs offer EoC and EoDS1 solutions**
  - Even with more fiber deployments, most business customers are in buildings served only by copper loops
  - Even where fiber is deployed, copper loops are often available
- **XO leases “dark” copper loops (DS0 UNEs) from ILECs and combines them to provide EoC at speeds up to 100 Mbps**
  - XO expects EoC speeds will increase further
- **The retail price for EoC on a per Mbps basis is significantly below the price for traditional TDM DS<sub>n</sub> services**
- **EoC does not work if there is fiber in the transmission line; hence the need to maintain access to home run copper loops**

# Ethernet over Copper (EoC) and Ethernet over DS1 (EoDS1)



## EoC Solutions - Up to 100 Mbps Today

Off-Net Access	Bandwidth	Distance from LSO	Facilities Used	CPE
EoC	3M	≤8,000 ft	2 copper pair	Netvanta 838
EoC	5M	≤8,000 ft	3 copper pair	Netvanta 838
EoC	10M	≤9,000 ft	5 copper pair	Netvanta 838
EoC	10M	9,001 - 11,000 ft	8 copper pair	Netvanta 838
EoC	15M	≤9,000 ft	8 copper pair	Netvanta 838
EoC	20M	≤7,000 ft	8 copper pair	Netvanta 838
EoC	30M	≤6,000 ft	10 copper pair	TA1424S-CE
EoC	40M	≤6,000 ft	13 copper pair	TA1424S-CE
EoC	50M	≤6,000 ft	16 copper pair	TA1424S-CE
EoC	60M	≤6,000 ft	20 copper pair	TA1424S-CE
EoC	70M	≤5,000 ft	20 copper pair	TA1424S-CE
EoC	100M	≤4,000 ft	22 copper pair	TA1424S-CE